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Geoff Stead

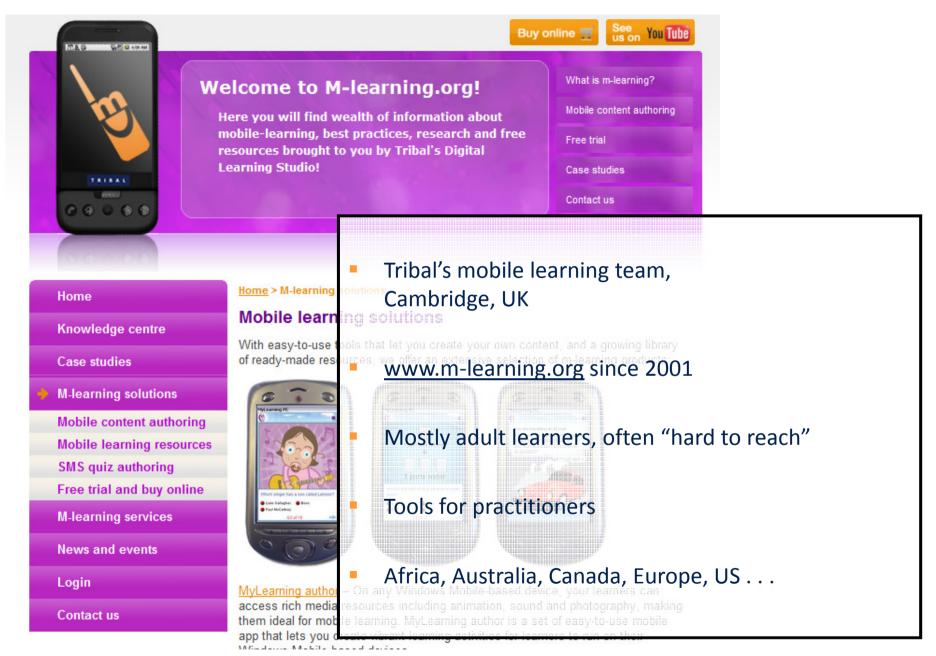
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Tribal

www.tribalgroup.co.uk www.m-learning.org



Mobile Learning – an overview



www.m-learning.org



The Context

- 5.8 billion mobile subscribers worldwide by 2013
- 50% of new internet connections in 2009 were from a phone
- 60% of the world's population can access fast mobile connections (HSPDA/3G+)
- 4 weeks ago, Mobile data use exceeded Voice in the USA
- Netbook sales in 2008 forecast at 5.3M, actual sales 14M 2012 forecast 50M
- Smartphone market share keeps going up and data rates keep going down



M-Learning is ...

The exploitation of ubiquitous handheld technologies, together with wireless and mobile phone networks, to facilitate, support, enhance and extend the reach of teaching and learning



Looking at some of our mobile content projects

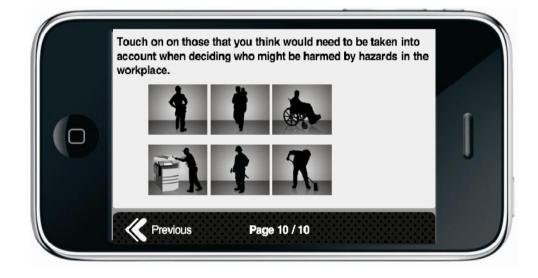
Beyond m-courses

SCORM vs Mobile – a whitepaper



Mobile courses







Sainsbury's



Objective Topic Title Reading Understand and and writing Adverbs 07/08/20 use adverbs. sentences grammar Understand the language of Reading instructions, and sentences -14/3 Instructions practise following grammar

KEEP your purse and wallet

tell you how to kee

out of reach!

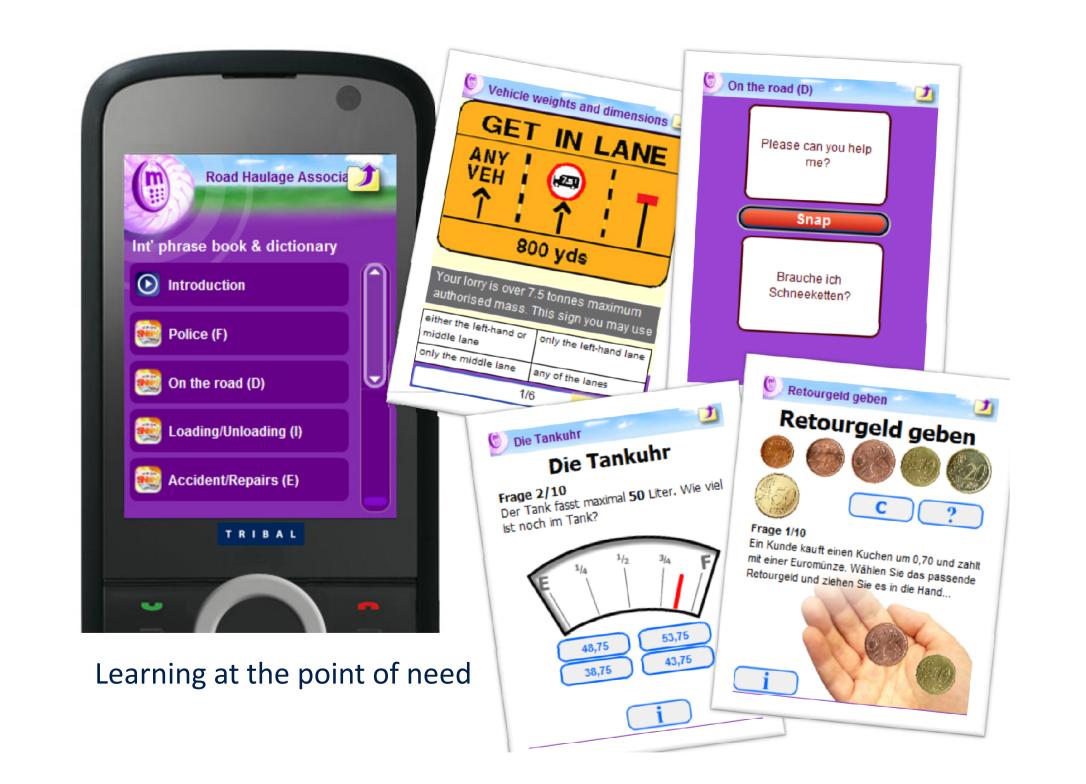
The point of this text is to

01 of

nelp you hide

Mobile extras (top-ups)

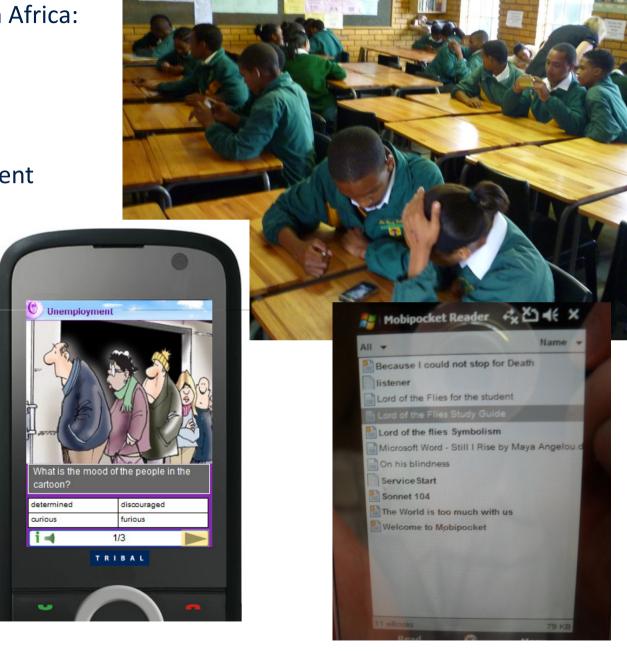




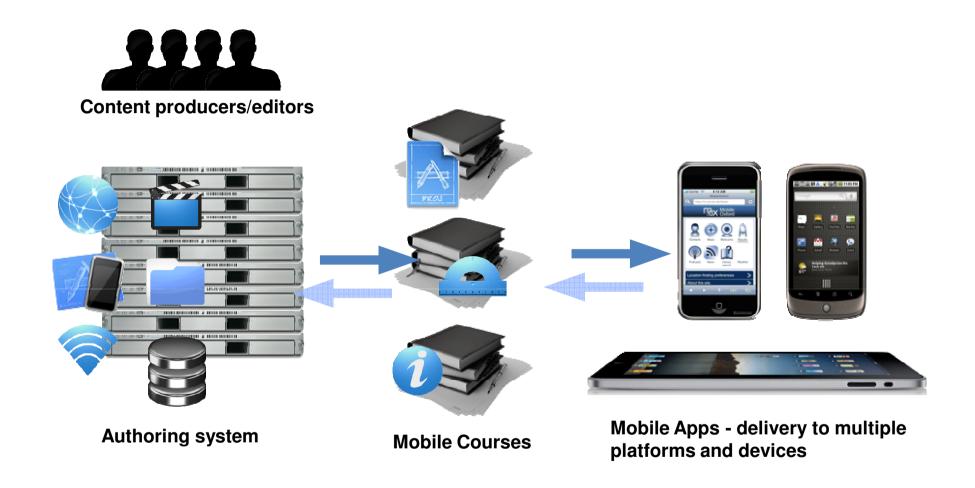
Literacy skills in South Africa:

E-Books

Locally authored content



Fit for purpose



Authoring tools for Editing, Contextualization and Localization

M-learning needs a broad range of solutions:

On and Offline *
Portable and phones
Single and Multi-users *
Learning and Screening

Evidence collection Smart search Short and sharp











Learning by doing

M-learning: beyond content

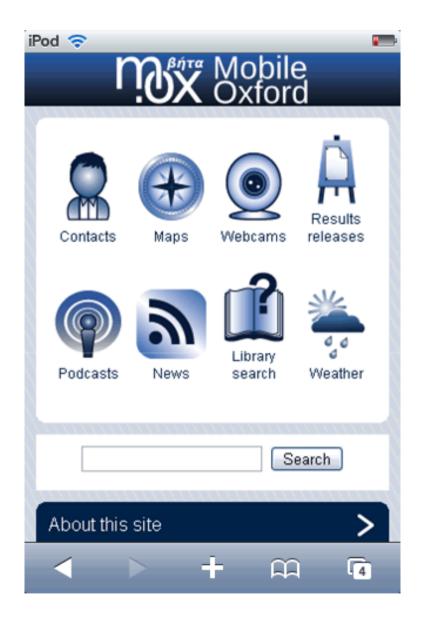
Mobile Oxford

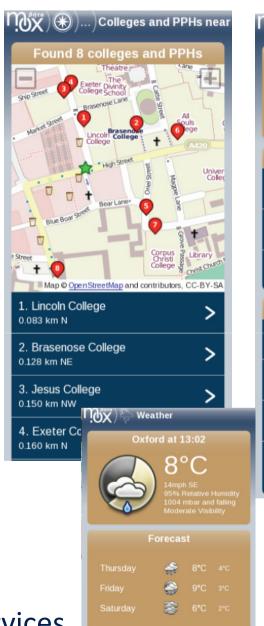














Mobile access to institutional services

m.oc.ac.uk



Abilene Christian University

- Every undergradudate receives an iPhone / iPod Touch
- Provides access to university's custombuilt online infrastructure



http://www.acu.edu/technology/mobilelearning/index.html



Normanby Primary School

Digital technology integrated into teaching

Technology complements learning – it is not

the focus of it





Layar browser

• Location-aware information stream – a.k.a.

the "reality browser"



http://www.layar.com



millee

 <u>m</u>obile and <u>i</u>mmersive <u>l</u>earning for <u>l</u>iteracy in <u>e</u>merging <u>e</u>conomies



Pedagogical approaches: m-learning vs e-learning



#	"Pedagogy"	M-learning	E-learning
1	VLE-based course participation (institutional CMSs with large-scale enrolment)	Previously, mobile devices have not been ideally suited to accessing VLEs due principally to graphical limitations. However, increasingly the leading VLEs are providing mobile front ends which enable mobile access. This is a growth area.	VLEs are almost universally designed for use in e-learning environments. They are almost certainly the most common digital tool used to support formal learning in educational institutions. Entire cohorts of students are enrolled in such systems and courses delivered through them.
2	Content delivery (consuming SCORM, applications, documents, video, audio, etc)	Almost all conceivable types of digital content may now be consumed on modern smartphones. The rise of applications ("apps") on Apple, Android and other devices offer a convenient, if not exclusive technique to distribute such content. Interactive educational content for m-learning (e.g. SCORM-based) needs to be designed differently from m-learning to take account of reduced graphical abilities.	All types of digital content may be consumed on PCs. It is arguably easier to read large documents in such an environment due to a tendency for larger screen real estate. Due to the earlier arrival of e-learning than m-learning, much educational content is exclusively designed for e-learning platforms (particularly graphically).
3	Social learning (consuming and generating content as part of an ongoing learning discussion)	Many of the major social media platforms are designed to fully support mobile devices. It is also possible to use mobiles to access forums and the blogosphere. This allows users of such devices to participate in social learning. Text input can be awkward, although this is improving. Generation of multimedia is straight forward.	At this time it arguably remains slightly easier to participate in social learning from a PC than a mobile device. However this is purely due to greater ease of text input and readability of non-mobile optimised websites. Also, PCs do not compete with the ease of gathering multimedia "on location", in which area mobile devices are superior.
4	Record of achievement (evidencing learning through upload of learner-generated content and reports)	As with VLEs, specialist front-ends are required to access existing e-portfolio systems on mobile platforms. However, this is technically feasible, and a growth area.	Use of electronic evidencing is well established in the elearning domain. Some overlap with VLEs.
5	Just-in-time training (training for the task immediately at hand) and "bite-size" learning (learning in odd	If the the training has been created, it may be accessed by the learner in almost any circumstance. This makes mobile	Available, but only practical in some circumstances. For example, it might be feasible to deliver JIT training on how

General conclusions

 "Traditional" e-learning approaches are not the whole picture when going mobile

M-learning allows previously impractical approaches to learning

 Focus on the learning not the technology to deliver the best learning solution

Mobile-SCORM Conclusions

- Technical: SCORM can be done on mobile as is
 - Consider handling connection issues in standard?
- Pedagogical: raison d'être (reusable content packages) is core. Then extend:
 - Ability to respond to location?
 - Support interaction between users?
- Expanding scope could benefit e-learning too!

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Any questions?